

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

August 23, 2022

Anatoly Dritschilo Chief Executive Officer Shuttle Pharmaceuticals Holdings, Inc. One Research Court, Suite 450 Rockville, MD 20850

> Re: Shuttle Pharmaceuticals Holdings, Inc. Amendment No. 3 to Registration Statement on Form S-1 Filed on August 19, 2022 File No. 333-265429

Dear Dr. Dritschilo:

We have reviewed your amended registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Amendment No. 3 to Registration Statement on Form S-1 filed August 19, 2022

Pre-IPO Bridge Financing, page 8

- 1. Please provide an analysis supporting your conclusion that the August 2022 offering qualified for the 506(b) safe harbor. Your analysis should address the fact that you had a registration statement on file at the time of the offering.
- 2. Please expand your disclosure to include the exercise prices of the warrants issued to Boustead Securities in each transaction.

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Underwriting Discount, page 92

3. We note your statement that you completed a \$125,000 unit private placement offering to three accredited investors on August 1, 2022, but you state on page 94 that the offering was made to two investors. Please revise to address the inconsistency.

You may contact Tracie Mariner at 202-551-3744 or Kevin Kuhar at 202-551-3662 if you have questions regarding comments on the financial statements and related matters. Please contact Jordan Nimitz at 202-551-5831 or Suzanne Hayes at 202-551-3675 with any other questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Megan Penick, Esq.